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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/540,041	07/16/2007	Susumu Yoshida	IWI-16045	8816
7609 7590 07/19/2010 RANKIN, HILL, & CLARK LLP 23755 Lorain Road - Suite 200 North Olmsted, OH 44070-2224				
EXAMINER				
GREENE, IVAN A				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/540,041

Applicant(s)

YOSHIDA ET AL.

Examiner

IVAN GREENE

Art Unit

1619

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2010.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-22 is/are pending in the application.
4a) Of the above claim(s) 20-22 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 10-19 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SI/225)
4) ☐ Interview Summary (PTO-413)
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____
Paper No(s)/Mail Date _____

DETAILED ACTION

All rejections and/or objections not explicitly maintained in the instant office action have been withdrawn per Applicants' claim amendments and/or persuasive arguments.

The examiner has checked the amendment to the specification and the claim, submitted 03/31/2010, and finds no new matter has been introduced.

Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

1. Group (I), claim(s) 10-19, drawn to an oil-in-water cosmetic composition.
2. Group (II), claim(s) 20-22, drawn to a method of making an oil-in-water cosmetic composition.

The groups of inventions listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: As set forth in Rule 13.1 of the Patent Cooperation Treaty (PCT), "the international application shall relate to one invention only or to a group of inventions." Moreover, as stated in Rule 13.2 PCT, Unity of Invention is satisfied "where a group of inventions is claimed in one and the same international application, the requirement of unity referred to in Rule 13.1 shall be fulfilled only when there is a technical relationship among those inventions involving one or more of the same or corresponding special technical features."

The expression "special technical features" shall mean those technical features that define a contribution which each of the claimed inventions, considered as a whole makes over the prior art so linked as to form a single general inventive concept." An oil-

in-water emulsion containing a succinoglycan and a plasticizer does not present a contribution over the prior art, as it is taught by, and therefore obvious over, BRIEVA in view of KNIPPER and PICARD (as discussed below). As a result, as currently presented, oil-in-water emulsion containing a succinoglycan and a plasticizer does not possess a special technical feature and, as such, unity between the above Groups (I) and (II) is lacking.

Newly submitted claims 10-22 directed to an invention that is independent or distinct from the invention originally claimed for the reasons discussed above.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 20-22 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. All claims directed to a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product

claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.** Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

Priority

The examiner has checked box 12 on the Office Action Summary (form PTO-326) because no certified copies of the Foreign priority documents JAPAN 2002-376841 and JAPAN 2002-381342 have been received in this national stage application.

Rejections

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

1. New ground of rejected necessitated by amendment: Claims 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over BRIEVA (US 5,066,485) in view of KNIPPER (US 5,514,792) and PICARD (US 5,510,100).

BRIEVA teaches oil-in-water emulsion compositions comprising: a pigment coated with polysiloxane; a silicone phase; a water phase and a polydiorganosiloxane-polyalkylene copolymeric surfactant (abstract). BRIEVA further teaches the coated pigment consists essentially of finely divided particles of pigment whose surfaces are chemically bonded to, and physically completely coated by, polysiloxane which coating renders the particles hydrophobic (1:19-24). BRIEVA further teaches suitable pigments included titanium dioxide and zinc oxide, inter alia (3:20-24). BRIEVA further teaches the pigment can be coated by mixing a dry, finely divided form, with a silicone material such as $A_1SiX_1X_2X_3$, wherein (A) is an alkyl or alkenyl group having 1 to 30 carbon atoms, and X_1 , X_2 , and X_3 are independently chloro, methoxy, or ethoxy (3:30-37). BRIEVA further teaches the oil phase comprises 10 to 80 weight percent of the composition (2:25-27).

BRIEVA teaches thickeners are useful for their oil-in-water emulsion, and specifically sodium carboxymethyl cellulose and/or hydroxyethyl cellulose, and xanthan gum can be used (7:3-15). BRIEVA further discloses the example containing 0.5% by

weight of the thickener xanthan gum (col. 8, Example 4). BREVEA teaches the inclusion of humectants such as glycerol (6:59-60).

Regarding the limitation "hydrophobicized powder is an ultraviolet rays scattering agent." A person having ordinary skill in the art would have clearly recognized that inorganic particles are opaque to ultraviolet light and thus would have been expected to scatter impinging UV rays (see, for example, US 7,361,785: col. 1, lines 50-65).

The difference between the rejected claims and the teachings of BRIEVA is that BRIEVA does not expressly teach succinoglycan or the amount of glycerol. The deficiency in the succinoglycan is cured by the teachings of KNIPPER (US 5,541,792).

KNIPPER teaches chemically modified succoglycan polysaccharides as well suited for use as thickening, stabilizing or suspending agents in cosmetics (abstract). KNIPPER further teaches succinoglycans exhibit rheological properties comparable to those of xanthan gum and are characterized by increased stability to temperature, to acidic and basic pH's and strongly saline media; thus provides an attractive substitute for xanthan gum (1:29-36).

Regarding the amount of the glycerol humectant it is the examiner's position that a person having ordinary skill in the art would have used a conventional amount of the humectant and the thickener. PICARD teaches oil-in-water emulsions containing xanthan gum in an amount of 0.2%, and humectants in amounts of 3% (see Examples 2, 4 and 5).

Finding of prima facie obviousness

Rationale and Motivation (MPEP 2142-2143)

It would have been *prima facie* obvious to one of ordinary skill in the art at the time the claimed invention was made to produce an oil-in-water cosmetic emulsion comprising hydrophobized dispersed powder particles such as zinc or titanium dioxide because the particles would have provided protection from harmful UV radiation and the hydrophobic treatment would have provided a more dispersible particle.

It would have been *prima facie* obvious to one of ordinary skill in the art at the time the claimed invention was made to add a succinoglycan to an oil-in-water emulsion, as suggested by KNIPPER, as a substitute for xanthan gum, which is disclosed by BREVIA in a concentration of 0.5% by weight in example 4 (8:47).

It would have been *prima facie* obvious to one of ordinary skill in the art at the time the claimed invention was made to include a humectant such as glycerol in an oil-in-water cosmetic because it would have provided a moisturizing effect for the users skin, and BREVIA teaches the inclusion of humectants such as glycerol (6:59-60).

It would have been *prima facie* obvious to one of ordinary skill in the art at the time the claimed invention was made to include a polyoxyalkylene-modified polysiloxane as a dispersant for the hydrophobized powder, as suggested by BRAVIA, because this would provide for a more homogenous distribution of the UV-ray protecting inorganic particles of titanium dioxide or zinc oxide, thus providing the user with a more even application.

2. New ground of rejected necessitated by amendment: Claims 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over BRIEVA (US

5,066,485) in view of KNIPPER (US 5,514,792), PICARD (US 5,510,100), MULLER (US 6,511,566) and MAGAURAN (US 5,340,390).

BRIEVA teaches oil-in-water emulsion compositions further containing a pigment coated with polysiloxane; a silicone phase; a water phase and a polydiorganosiloxane-polyalkylene copolymeric surfactant, as discussed above.

The difference between the rejected claims and the teachings of BRIEVA is that BRIEVA does not expressly teach 12-hydroxystearic acid added polyglycerol. The deficiency in the 12-hydroxystearic acid-added polyglycerol is cured by the teachings of MULLER.

MULLER teaches low-viscosity cosmetic oil-in-water compositions containing hydrophobic and/or amphiphilic solids, such as titanium dioxide, in the oil phase (abstract; 8:49-56; 9:20-50). MULLER further teaches glyceryl tri(12-hydroxystearate), a 12-hydroxystearic acid-added polyglycerol, as a wax ester thickener (15:7-15; 16:15-20).

KNIPPER teaches chemically modified succoglycan polysaccharides, as discussed above.

Finding of prima facie obviousness

Rationale and Motivation (MPEP 2142-2143)

The obviousness of the instantly claimed invention over BRIEVA in view of KNIPPER (and PICARD) is discussed above.

It would have been *prima facie* obvious to one of ordinary skill in the art at the time the claimed invention was made to produce an oil-in-water cosmetic emulsion

comprising a wax ester thickener, as taught by MULLER, because the thickener would have provided improved dispersibility of the solid particles, as suggested by MAGAURAN (abstract).

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

In light of the forgoing discussion, the Examiner concludes that the subject matter defined by the instant claims would have been obvious within the meaning of 35 USC 103(a).

Response to Arguments:

Applicant's arguments filed 03/31/2010 have been fully considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. GUERIN (WO 1998/24408) is relevant to the instant application because they teach cosmetic compositions comprising a succinoglycan. The following teaching are noted: GUERIN teaches aqueous cosmetic compositions containing at least a surfactant, a water insoluble and non-volatile organopolysiloxane and a stabilizing succinoglycan (abstract). GUERIN further teaches succinoglycans as

stabilizers for the non-volatile insoluble silicone and inorganic pigment particles (p. 5, lines 4-9). GUERIN further teaches the form of the cosmetic vehicle include, for example, oil-in-water emulsions (p. 6, 30-32). GUERIN teaches the inclusion of a glycerol wetting agent (p. 9, 29-30). GUERIN teaches the inclusion of a polymeric dispersing agent such as polyethylene glycol with a molecular mass of about 1000 to 50,000 (p. 11, lines 16, 17 & 27). GUERIN further teaches the inclusion of 0.05 to 3 parts by weight of succinoglycan (p. 12, lines 32-33). KINSMAN (Journal of the American Oil Chemists Society, Vol. 56, pp. 823A-827A) is relevant to the instant application because KINSMAN teaches the benefits of isostearic acid in cosmetic compositions (see p. 826A, Table VII, column item titled: "Cosmetics," and accompanying text).

Claims 10-19 have been examined on the merits. The instant specification is objected; claims 2, 3 and 5 are objected; claims 1, 2, 4, 8 and 9 are rejected under 35 U.S.C. 102(b); and claims 3, and 5-9 are rejected under 35 U.S.C. 103(a). No claims allowed at this time.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to IVAN GREENE whose telephone number is (571)270-5868. The examiner can normally be reached on Monday through Thursday 7AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bonnie Eyler can be reached on (571) 272-0871. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/YVONNE L. EYLER/

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Supervisory Patent Examiner, Art Unit 1619

IVAN GREENE

Examiner, Art Unit 1619